

Figure 1. Classification of Microvalves.

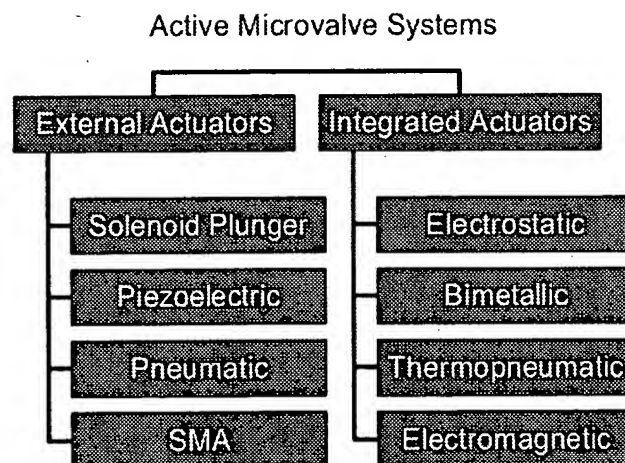


Figure 2. Summary of Microvalve Actuation Mechanisms

10

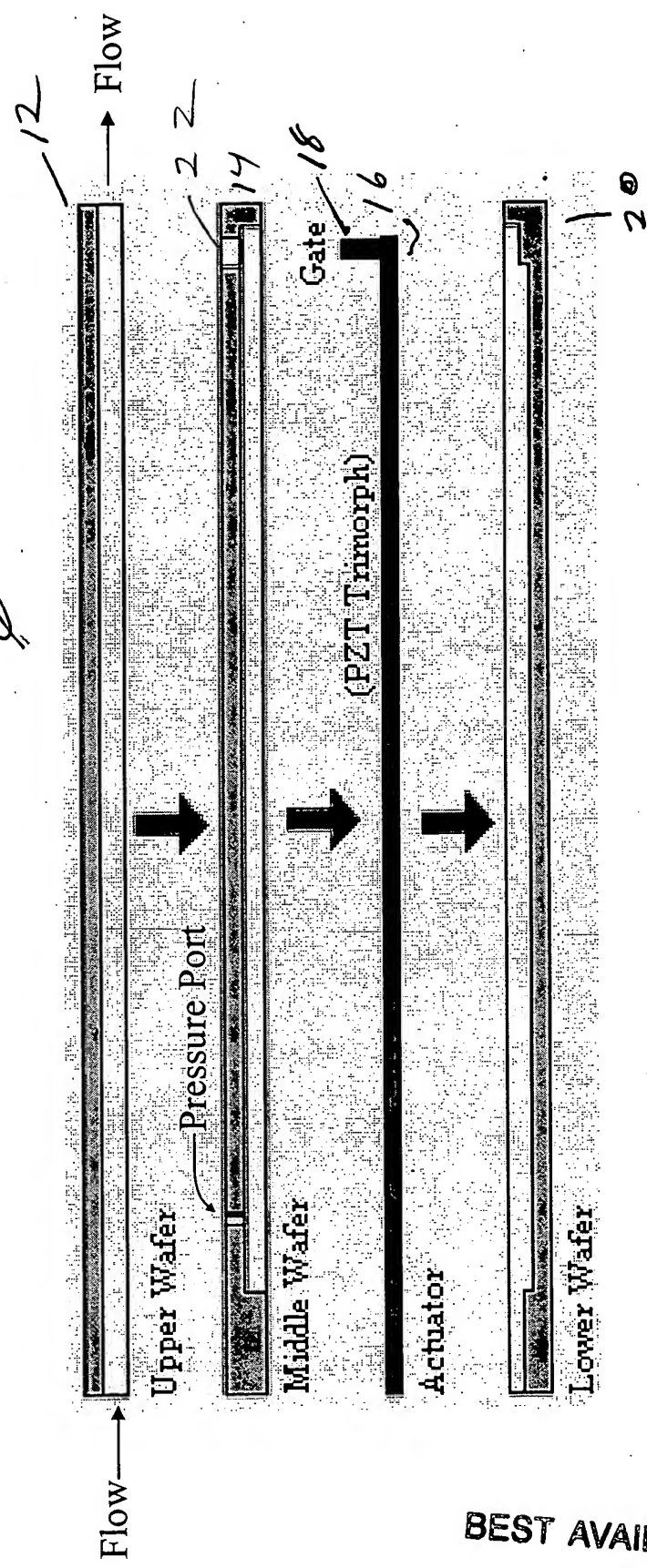


Fig. 3

MICROVALVE ASSEMBLY
CROSS SECTIONAL VIEW

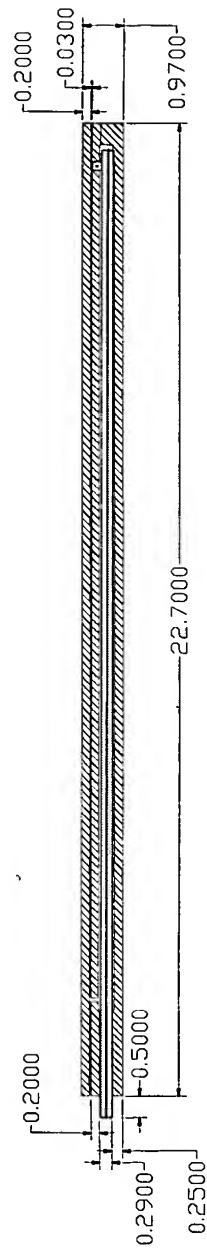
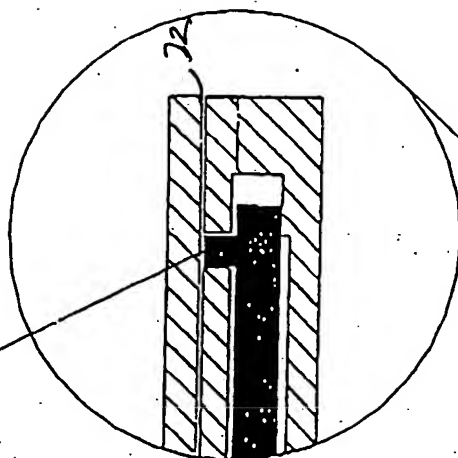
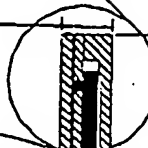


Fig 36

VALVE OPEN



0.9700mm



22.7000mm

MICROVALVE ASSEMBLY
CROSS SECTIONAL VIEW

Fig 30

BEST AVAILABLE COPY

VALVE CLOSED

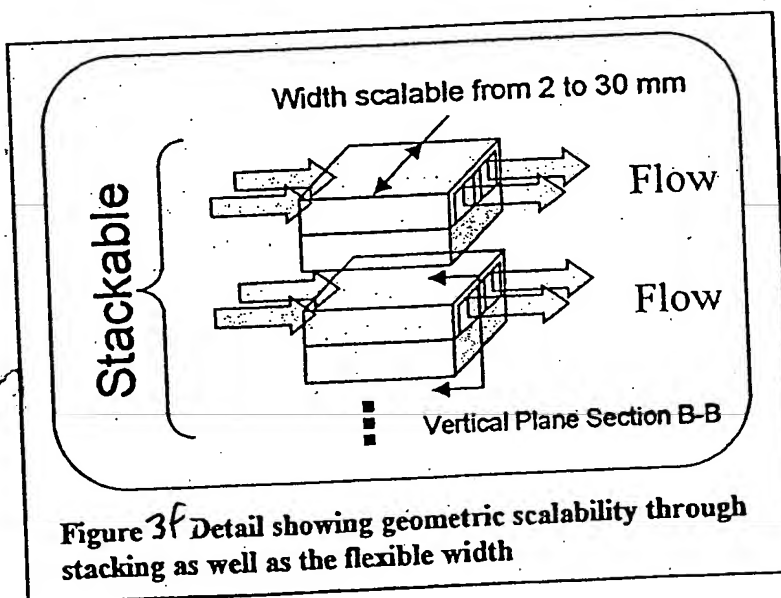
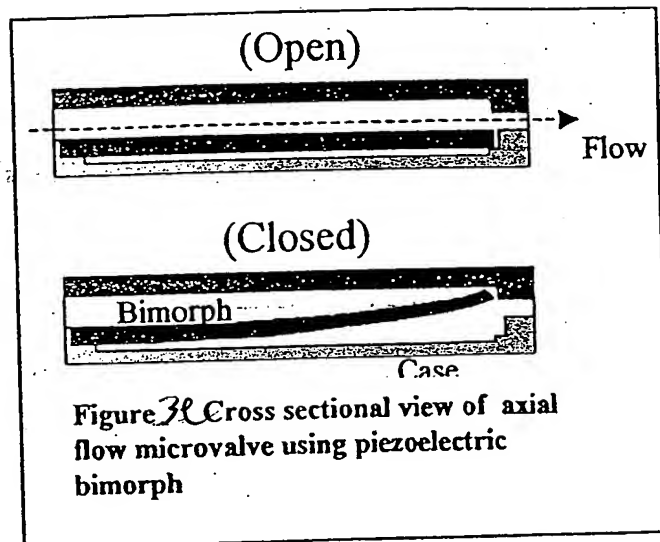
MICROVALVE ASSEMBLY
CROSS SECTIONAL VIEW

0.9700mm

22.7000mm

Fig 3d

BEST AVAILABLE COPY



BEST AVAILABLE COPY

Fig 4

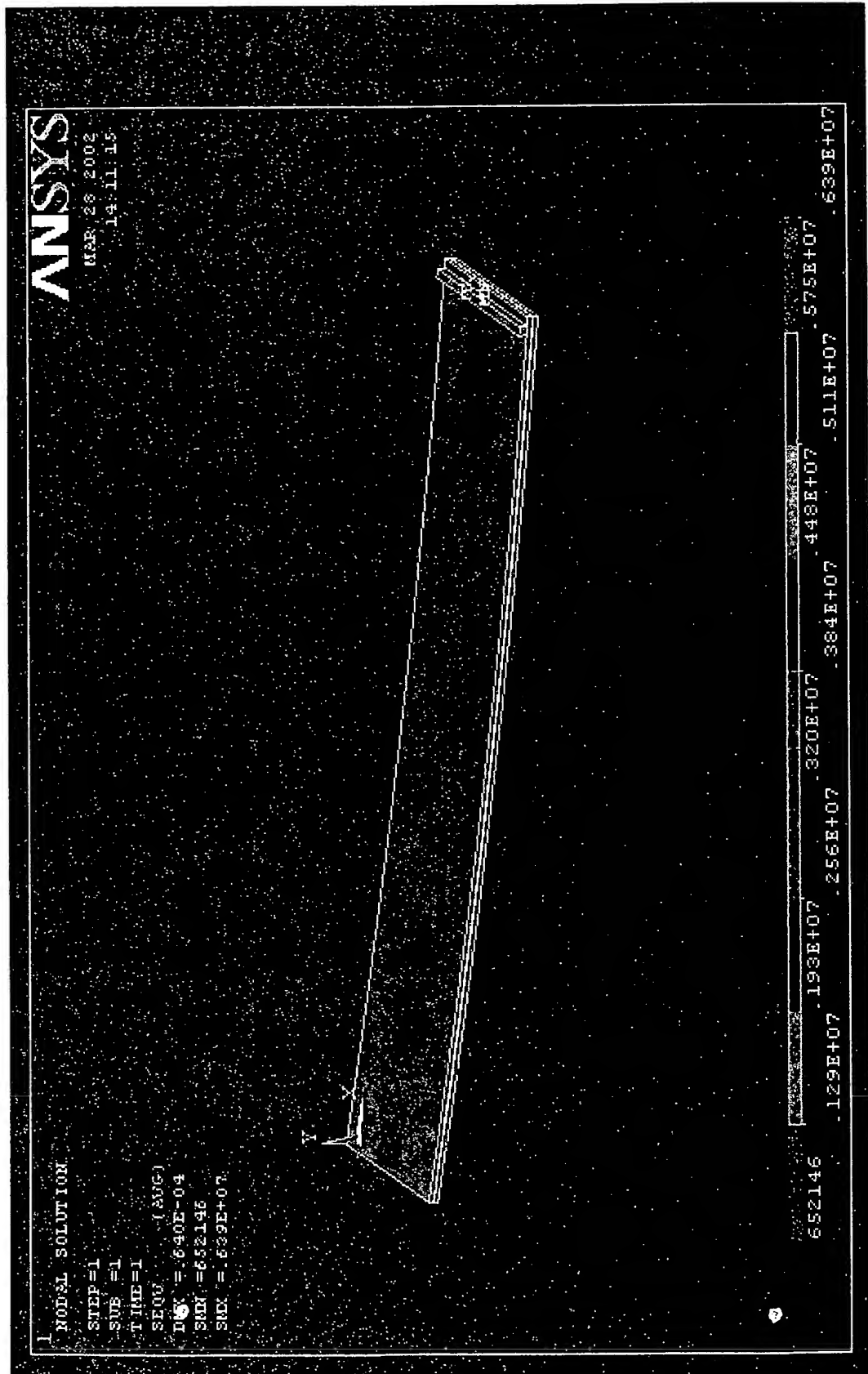


Fig 5

ANSYS

MSK 28 2002
13:56:48

1 MODEL SOLUTION

STEP=1

SUB =1

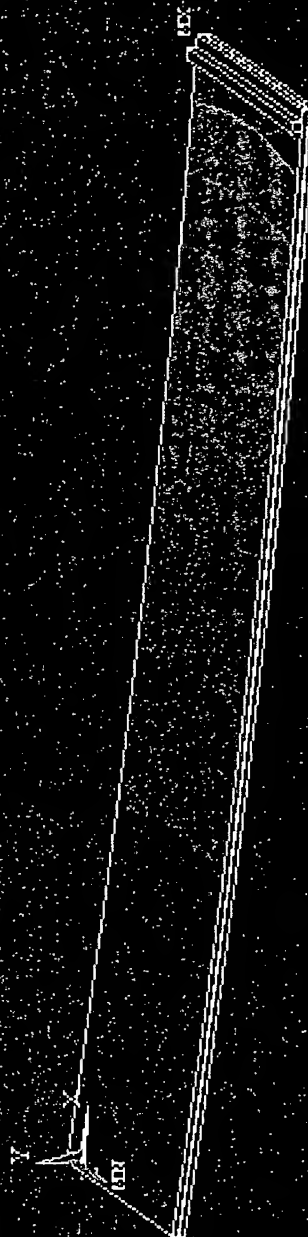
TIME=1

UT (X05)

DMX =.646E-04

SAM =-.888E-07

SAX =.640E-04



| | | | | | |
|------------|----------|----------|----------|----------|----------|
| - .888E-07 | .704E-05 | .142E-04 | .284E-04 | .447E-04 | .563E-04 |
| | | .412E-04 | .555E-04 | .498E-04 | .640E-04 |

Fig 6

